

Notice of Allowability

Application No.

10/749,299

Examiner

Kenneth M. Lo

Applicant(s)

COLGROVE ET AL.

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/10/2007.
2. ☒ The allowed claim(s) is/are 1,2,6-12, 14-15, 17-22, 26-33 and 37-42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date attached.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


HYUNG SOUH
SUPERVISORY PATENT EXAMINER

8/20/07

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert C. Kowert (#39,255) on August 16, 2007.

2. The application has been amended as follows:

IN THE CLAIMS

Claim 1, line 9, after "modifiable", --but is readable-- has been inserted.

Claim 13, has been canceled.

Claim 14, line 9, after "modifiable", --but is readable-- has been inserted.

Claim 19, line 6, after "modifiable", --but is readable-- has been inserted.

Claim 21, line 5, after "modifiable", --but is readable-- has been inserted.

Claim 32, line 7, after "modifiable", --but is readable-- has been inserted.

3. The following is an examiner's statement of reasons for allowance:

The prior art of records fails to disclose, a multi-class file system/method/computer accessible medium comprising program instructions, comprising/means for a hierarchy of storage classes, wherein the migrated data remains online within the multi-class file system, wherein one or more of the storage classes store data that is not modifiable but is readable by applications while the data is on the one or more storage classes, and wherein one or more others of the storage classes store data that is modifiable by applications while the data is on the one or more storage classes as per independent Claims 1, 14, 19, 21, and 32.

The prior art of record shows:

Kishi (US 6,029,179) and Thomas (US 6,061,692) show a combined system which teaches a hierarchy storage class system where data is migrated to a different classes, wherein some storage classes can be operated upon by split mirrors. Kishi teaches where data had been migrated to a storage class whose storage device becomes, unstable or conditioned as 'failing', whereby the system of Kishi prevents modification to the data on the storage device. This is shown in the Office Action dated 4/19/2007. However Kishi, nor Thomas teach a system where the data is not modifiable, but yet still readable by applications while the data is on the storage class.

Colgrove (US 7,103,740) and Colgrove (US 7,103,740) are included for reference, as they do not qualify as prior art. The claimed inventions in the two above

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reference patents do not qualify under Double Patenting as they do not claim the same subject matter.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth M. Lo whose telephone number is 571-272-9774. The examiner can normally be reached on Mon - Thu (7:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Souh can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kenneth Lo
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HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
8/20/07